

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Zuhua ZHU, et al.

Serial No. : 09/927,802

Group Art Unit: 2881

Date Filed : August 10, 2001

Examiner:

For : OPTICAL COMMUNICATIONS SYSTEM AND  
VERTICAL CAVITY SURFACE EMITTING LASER THEREFOR1185 Avenue of the Americas  
New York, N.Y. 10036

Assistant Commissioner for Patents

Box Missing Parts

Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

The information listed in the attached form PTO-1449 is brought to the attention of the Examiner. Copies of the information identified herein are also provided.

It is respectfully requested that the information cited in annexed Form PTO-1449 be considered by the Examiner in connection with the above-identified patent application, and that such art be made of record in said application.

The Examiner's attention is directed to the documents cited on the attached Form PTO-1449 and to the following copending, commonly owned U.S. patent application (copy enclosed):

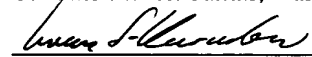
U.S. Serial No.Date Filed

09/781,352

February 12, 2001

and to any prior art or other documents cited in said copending applications.

I hereby certify that this paper is being deposited this date with the U.S. Postal Service as first class mail addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.



Nov. 13, 2001

Ivan S. Kavrukov

Date

Reg. No. 25,161

The citation of the listed items is not a representation that they constitute a complete or exhaustive listing of the relevant art or that these items are prior art. The items listed are submitted in good faith, but are not intended to substitute for the Examiner's search. It is hoped, however, that in addition to apprising the Examiner of the particular items, they will assist in identifying fields of search and in making as full and complete a search as possible.

The filing of this Information Disclosure Statement is not an admission that the information cited herein is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

To the best of Applicant(s) knowledge, this Information Disclosure Statement is being filed before the date of mailing of a first Office Action on the merits in connection with this case.

The Office is hereby authorized to charge any fees that may be required for consideration of this Information Disclosure Statement and to credit any overpayment to our Deposit Account No. 03-3125.

Early and favorable consideration of the case is respectfully requested.

Respectfully submitted,



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Form PTO-1449

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket No.

0980/65686

Serial N .

09/927,802

INFORMATION DISCLOSURE CITATION  
BY APPLICANT

(Use several sheets if necessary)

Applicant

Zuhua Zhu, et al.

Filing Date

August 10, 2001

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2881

## U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
AA	4 5 2 2 6 6 2	06/11/85	Bradbury et al.			
AB	5 8 2 5 7 9 6	10/20/98	Jewell et al.			
AC	5 8 3 8 7 1 5	11/17/98	Corzine et al.			
AD	6 0 2 6 1 1 1	02/15/00	Jiang et al.			
AE	6 1 1 1 2 7 6	08/29/00	Mauk			
AF	6 1 2 2 1 0 9	09/19/00	Peake et al.			
AG	6 1 5 4 5 8 9	11/28/00	Kirk et al.			
AH						
AI						

## FOREIGN PATENT DOCUMENTS

Document Number	Date	Country	Class	Subclass	Translation	
					Yes	No
AJ						
AK						

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AL	Wilmsen et. al., eds., <i>Vertical Cavity Surface Emitting Lasers: Design, Fabrication, Characterization, and Applications</i> , Cambridge University Press (1999).
AM	Unhold et.al., "Improving Single-Mode VCSEL Performance by Introducing Long Monolithic Cavity," IEEE Photonics Technology Letters, Vol. 12, No. 8 (August 2000).
AN	Yariv, A., <i>Introduction to Optical Electronics</i> , Holt Rinehart and Winston (1976).
AO	Adachi et. al., "Chemical Etching Characteristics of (001) InP," J. Electrochem. Soc., Vol. 128, pp. 1342-1349 (1981).
AP	Liau et. al., "Surface-Emitting GaInAsP/InP Laser With Low Threshold Current and High Efficiency," Applied Physics Letters, vol. 46, pp. 115-117 (1985).
AQ	Strzelecka et. al, "Fabrication of Refractive Microlenses in Semiconductors by Mask Shape Transfer in Reactive Ion Etching," Microelectronic Engineering, vol. 35, pp. 385-388 (1997).
AR	U.S. Application No. 09/781,352 filed February 12, 2001

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.